Fall 2015 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0012 Sutter Maintenance Yard Maintenance	Overall LMA Rating	Total LMA Miles							
Area 0012	A	11.06							
Rated Item		Maintenance Deficiancy			Enforc	Enforcement		Design & System Obsolescence	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles	
Earthen Levee									
Encroachments					1.15				
Animal Control	0.01		0.01	0.09%					
Supplemental									
DWR UCIP Field Study					0.07	0.08			
LMA Totals:	0.01	0.00	0.01	0.09%	1.22	0.08	0.00	0.00	

LMA District Cover Sheet Fall 2015 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0012

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
* Overall LMA Rating (Fall Only)			A						
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effect	ct overall annual rating					
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.									
Comments									

Unit Cover Sheet

Fall 2015 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles
Unit No. 01 Colusa Drain	Left	11.06

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/11/2015 - 03/11/2015		09/15/2015 - 09/15/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start		Rating **	Α	Issue No.		12	
LM End		Issue Type +	Ma	Location *	N/A		
	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Itom	Item Emergency Supplies & Equipment				0		0
item				0			0
DWR ID	DWR_MA0	012_01_s _ 201	13_12				
		Action/	Comme	nts			
Inspector Comments: The LMA has adequate flood fight supplies and equipment.							

No Photos

Rating ** Issue No. LM Start 13 LM End Issue Type + Ma Location * N/A Earthen Levee GPS Latitude/Longitude Category End Start Operations & Maintenance Item Manuals DWR ID DWR_MA0012_01_s _ 2013_13 Action/Comments Inspector Comments: The LMA has the O&M manuals.

No Photos

Rating ** Issue No. LM Start Issue Type + Location * N/A Ma LM End Earthen Levee GPS Latitude/Longitude Category Flood Preparedness & Training Item DWR ID DWR_MA0012_01_s _ 2013_14 Action/Comments

No Photos

Inspector Comments: The LMA completed flood fight training in 2014.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	0.23	Rating **	М	Issue No.		207
LM End	0.23	Issue Type +	En	Location *		N/A
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UCI	P Field Study		39.03588	39°	39.035889 °
пеш				-121.99688	32 °	-121.996882 °
DWR ID						

Action/Comments

Inspector Comments: FS_ID:44933

DS_ID:17145 EP_NO: 9381 FS_HLM: 0.24

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/4/2015 Abandoned crossing. Need to verify proper abandonment of pipe. 7/16/2013 Same as last

inspection.12/16/2013 Same as last inspection.6/17/2014 Same as

last inspection.

FIELD_STRUCT_DESC: *Abandoned* 14-inch pipe through levee, 3.0 feet below crown. Open on waterward end. 3-foot x 6-foot concrete well on waterward berm. Siphon breaker in 24-inch pipe riser on landward shoulder. 36-inch concrete standpipe on landward berm. (Permit No. 9381 - Tribble). Originally included in O+M Manual (1959). Asbuilt available 50-4-3081. (The only item identified is the 36-inch standpipe on the LS toe).

FS Date: 05/05/2015



36-inch concrete riser on LS toe.

LM Start	0.49	Rating **	U	Issue No.		Issue No. 20		208
LM End	0.49	Issue Type +	En	Location *		N/A		
Category				GPS Latitude/Longitude				
Category	Category					End		
Item	DWR UCI	IP Field Study		39.03941	3°	39.039413 °		
пеш				-121.99776	66°	-121.997766 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:44939

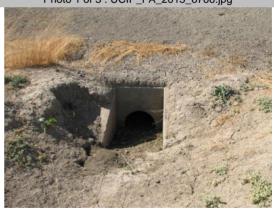
DS_ID:17146 EP_NO: 9382 FS_HLM: 0.502 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned. Pipe is partially filled with soil. 7/16/2013 Sediment is built up against WS flapgate preventing it from opening. 12/16/2013 Sediment against flapgate has been cleared and it can now function properly. 6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drain pipe through levee, 13.0 feet below the crown. Flap gate, concrete headwall and grouted cobble spillway on waterward side. Concrete headwall on landward side. (Permit No. 9382 Baber). Originally included in O+M manual (1959). Asbuilt available 50-4-3081.

FS Date: 05/05/2015





Inlet and concrete headwall on LS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	0.49	Rating **	U	Issue No.		208 (cont)	
LM End	0.49	Issue Type +	En	Location *		N/A	
Supplemental				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UCI	P Field Study		39.03941	3°	39.039413 °	
item				-121.99776	6°	-121.997766 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:44939

DS_ID:17146 EP_NO: 9382 FS_HLM: 0.502 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 WS flap gate is blocked by sediment and unable to open. LS inlet is about 50% plugged with soil. Needs to be cleaned. Pipe is partially filled with soil. 7/16/2013 Sediment is built up against WS flapgate preventing it from opening. 12/16/2013 Sediment against flapgate has been cleared and it can now function properly. 6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drain pipe through levee, 13.0 feet below the crown. Flap gate, concrete headwall and grouted cobble spillway on waterward side. Concrete headwall on landward side. (Permit No. 9382 Baber). Originally included in O+M manual (1959). Asbuilt available 50-4-3081.

FS Date: 05/05/2015





Outlet at WS toe.



Intake at LS toe.

Levee Inspection Report By Mile - Fall 2015

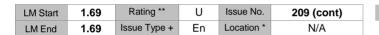
Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	1.69	.69 Rating ** U		Issue No.		209	
LM End	1.69	Issue Type +	En	Location *	Location * N/		
Category	ental	GPS La	atitud	e/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	39.0557	11 °	39.055711 °	
item				-122.0032	52 °	-122.003252 °	
DWR ID							
	Action/Comments						

Inspector Comments: FS_ID:44945

DS_ID:17149 EP_NO: 9382 FS_HLM: 1.727 Repair Type: Urgent Crossing Status: Found





Concrete U shaped headwall at LS inlet.

Photo 2 of 3: UCIP_FA_2015_3745.jpg



Inlet on LS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	1.69	Rating **	U	Issue No.		209 (cont)		
LM End	1.69	Issue Type + En		Location *	N/A			
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.05571	1°	39.055711	0	
пеш			-122.00325	2°	-122.003252	0		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:44945

DS_ID:17149 EP_NO: 9382 FS_HLM: 1.727 Repair Type: Urgent Crossing Status: Found



Outlet on WS toe.

LM Start	1.77	Rating **	U	Issue No.		210
LM End	1.77	Issue Type + En		Location *	tion * N/A	
Category	Suppleme	ental	GPS La	atitud	le/Longitude	
Calegory				Start		End
Item	DWR UCI	P Field Study		39.0568	47 °	39.056847 °
пеш			-122.0032	88 °	-122.003288 °	
DWR ID						

Action/Comments

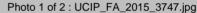
Inspector Comments: FS_ID:44954

DS ID:17150 EP_NO: 9387 FS_HLM: 1.81 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 WS flapgate mostly underwater but could tell it was blocked open by something. LS inlet is located about 1/4 mile north along the side of the roadway. No inlet could be located on LS. Flap gate partially blocked and will not close

completely.7/16/2013 Same as last inspection. Was told inlet is about 1/4 mile down road way next to house. Will try to get coordinates for inlet.12/16/2013 Pipe was flowing water and flap gate was bing pushed open. Cannot verify if it will close all the way.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch drain pipe through the levee 20.0 feet below crown. Slide gate in 60-inch pipe riser on waterward slope. Flap gate and concrete headwall on waterward side. (Permit No. 9387 -Christenson). Originally included in O+M manual (1959). FS Date: 05/05/2015





Flap gate and concrete headwall at WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	1.77	Rating **	Issue No.		210 (cont)			
LM End	1.77	Issue Type + En		Location *		N/A		
Category	Supplemental					GPS Latitude/Longitude		
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.05684	۰ ۲	39.056847°		
item			-122.00328	88 °	-122.003288 °			
DWR ID								

Action/Comments

Inspector Comments: FS_ID:44954

DS_ID:17150 EP_NO: 9387 FS_HLM: 1.81 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 WS flapgate mostly underwater but could tell it was blocked open by something. LS inlet is located about 1/4 mile north along the side of the roadway. No inlet could be located on

LS. Flap gate partially blocked and will not close

completely.7/16/2013 Same as last inspection. Was told inlet is about 1/4 mile down road way next to house. Will try to get coordinates for inlet.12/16/2013 Pipe was flowing water and flap gate was bing pushed open. Cannot verify if it will close all the way.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch drain pipe through the levee 20.0 feet below crown. Slide gate in 60-inch pipe riser on waterward slope. Flap gate and concrete headwall on waterward side. (Permit No. 9387 -Christenson). Originally included in O+M manual (1959).

FS Date: 05/05/2015



60-inch standpipe with slide gate on WS slope with outlet in background.

LM Start	1.98	Rating **	U	Issue No.		211			
LM End	1.98	Issue Type +	En	Location *		N/A			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.05977	3°	39.059773			
пеш			-122.00439	1°	-122.004391				
DWR ID									

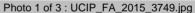
Action/Comments

Inspector Comments: FS_ID:44955

DS_ID:17151 EP_NO: 9391 FS_HLM: 2.02 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is. Inlet is partially filled with soil. 7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drain pipe through levee, 13.0 feet below crown. Flap gate, concrete headwall and grouted cobble spillway on the waterward side. Concrete headwall on landward side. (Permit No. 9391 Christenson). Originally included in O+M manual (1959). FS Date: 05/05/2015





Concrete U shaped headwall at LS toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	1.98	Rating **	U	Issue No.		211 (cont)
LM End	1.98	Issue Type +	En	Location *		N/A
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.05977	′3 °	39.059773 °
пеш			-122.00439	91 °	-122.004391 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:44955

DS_ID:17151 EP_NO: 9391 FS_HLM: 2.02 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 LS and WS ends are blocked with soil. Pipe is inoperable as it is.Inlet is partially filled with soil.7/16/2013 LS inlet is completely filled with soil. Needs to be cleaned out.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch CM drain pipe through levee, 13.0 feet below crown. Flap gate, concrete headwall and grouted cobble spillway on the waterward side. Concrete headwall on landward side. (Permit No. 9391 Christenson). Originally included in O+M manual (1959). FS Date: 05/05/2015

LM Start	1.98	Rating **	U	Issue No.	211 (cont)
LM End	1.98	Issue Type +	En	Location *	N/A



LS view of inlet.

Photo 3 of 3: UCIP_FA_2015_3751.jpg



WS view of outlet.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	2.58	Rating **	М	Issue No.		1	
LM End	3.68	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	Encroachments			43 °	39.081684 °	
пеш			-122.0096	11 °	-122.016243 °		
DWR ID	DWR_MA0	012_01_s _ 201	12_1				
		Action/	Comme	nts			
Ditch							

No Photos

LM Start	3.43	Rating **	Α	Issue No.		25		
LM End	3.43	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory			Start		End			
Item	Vegetatio	n		39.07816	65 °	39.078165 °		
пеш				-122.01604	10 °	-122.016040 °		
DWR ID DWR_MA0012_01_f _ 2015_25								
	Action/Comments							

Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard burned and dragged both slopes.

Photo 1 of 1: FA_2015_MA0012_299_25_20151013_00006.jpg



View of the levee with no vegetation on both slopes.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	3.69	Rating **	U	Issue No.		212
LM End	3.69	Issue Type +	En	Location *		LS
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.08194	9°	39.081949 °
пеш			-122.01617	'9 °	-122.016179 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:44963

DS_ID:17154 EP_NO: 9388 FS_HLM: 3.777 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way. Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry.7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season.12/16/2013 Slide gate stem is still bent. WS flapgate was closed.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch CM pipe through the levee, 28.0 feet below the crown. Slide gate in 66-inch pipe riser on the waterward slope. Concrete headwall on the waterward side. Grouted cobble spillway from drain ditch to large canal on the landward side. (Permit No. 9388 Wallace) Originally included in the O+M manual (1959). FS Date: 05/05/2015



Drainage ditch on LS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	3.69	Rating ** U Issu		Issue No.		Issue No.		212 (cont)	
LM End	3.69	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.08194	19°	39.081949 °			
пеш			-122.01617	79°	-122.016179 °				
DWR ID									

Action/Comments

Inspector Comments: FS_ID:44963

DS_ID:17154 EP_NO: 9388 FS_HLM: 3.777 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Slide gate stem is still bent. Gate looks to be unable to close all the way. Slide gate inoperable, but appears to be in closed position. Flap gate held in open position. Good candidate for video inspection when, if ever, dry.7/16/2013 Water flowing through pipe so screw gate definately not closed. Was told NOV's have been sent for owner to replace stem. Flap gate gets closed for flood season.12/16/2013 Slide gate stem is still bent. WS flapgate was closed.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch CM pipe through the levee, 28.0 feet below the crown. Slide gate in 66-inch pipe riser on the waterward slope. Concrete headwall on the waterward side. Grouted cobble spillway from drain ditch to large canal on the landward side. (Permit No. 9388 Wallace) Originally included in the O+M manual (1959). FS Date: 05/05/2015



Slide gate in corrugated metal riser on WS slope.

LM Start	4.23	Rating **	М	Issue No.		213	
Livi Otart							
LM End	4.23	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Category				Start		End	
Item	DWR UCI	IP Field Study		39.08966	66°	39.089666 °	
пеш				-122.01524	18 °	-122.015248 °	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:44968

DS_ID:20717 EP_NO: N/A FS_HLM: 4.326

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Corssing appears to be in good condition.

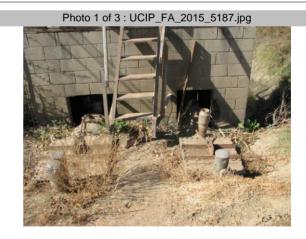
No noticeable issues to report. No permit identified for this

crossing.7/16/2013 Same as last inspection.12/16/2013 Pump has been removed for winter.6/17/2014 Same as last inspection. Pump reinstalled on pier.

FIELD_STRUCT_DESC: 24-inch steel pipe though levee, 4.5 feet below crown. Pump in pump house on waterward bank. Siphon

breaker valve installed on LS shoulder.

FS Date: 05/05/2015



Pipe on seft side of photo.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	4.23	Rating **	М	Issue No.		213 (cont)	
LM End	4.23	Issue Type +	ie Type + En		Location *		
Category	Supplemental				itud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.08966	6°	39.089666	٥
пеш			-122.01524	8°	-122.015248	٥	
DWR ID					·		

Action/Comments

Inspector Comments: FS_ID:44968

DS_ID:20717 EP_NO: N/A FS_HLM: 4.326

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Corssing appears to be in good condition.

No noticeable issues to report. No permit identified for this

crossing.7/16/2013 Same as last inspection.12/16/2013 Pump has been removed for winter.6/17/2014 Same as last inspection. Pump

reinstalled on pier.

FIELD_STRUCT_DESC: 24-inch steel pipe though levee, 4.5 feet below crown. Pump in pump house on waterward bank. Siphon

breaker valve installed on LS shoulder.

FS Date: 05/05/2015

LM Start	4.23	Rating **	М	Issue No.	213 (cont)
LM End	4.23	Issue Type +	En	Location *	LS



Pumping plant on WS toe.

Photo 3 of 3: UCIP_FA_2015_6236.jpg



Possible siphon breaker for pipe on LS shoulder.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	4.72	Rating **	С	Issue No.		22	
LM End	4.72	Issue Type +	Ma	Location *	WS		
Catagony Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Category					End	
Item	Repair Ga		39.0967	77 °	39.096777	٥	
пеш				-122.0155	48 °	-122.015548	٥
DWR ID	DWR_MA0	012_01_f _ 201	4_22				
		Action/	Comme	nts			

No Photos

LM Start	4.72	Rating **	М	Issue No.		4	
LM End	4.77	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
Item	Encroach	Encroachments			39°	39.097455 °	
item				-122.0155	68 °	-122.015581 °	
DWR ID	DWR_MA0	012_01_s _ 20 ⁻	12_4				
		Action/	Comme	nts			
Ditch							

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.01	Rating **	U	Issue No.	214	
LM End	5.01	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
Calegory						End
Item	DWR UCI	P Field Study		39.10089	98 °	39.100898 °
пеш				-122.01607	'8 °	-122.016078 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:44970

DS_ID:17191 EP_NO: N/A FS_HLM: 5.121 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 WS flapgate is blocked by sediment and unable to open. LS inlet is hidden by sediment and heavy vegetation and unable to be located. Needs to be cleared. Pipe is clogged at

both the inlet and outlet. Good candidate for video

inspection.7/16/2013 Same as last inspection.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 48-inch CM pipe approximately 15 feet below

the crown. Concrete headwalls on both ends with an automatic drainage gate on the WS.

FS Date: 05/05/2015

LM Start	5.01	Rating **	U	Issue No.	214 (cont)
LM End	5.01	Issue Type +	En	Location *	LS



Photo 1 of 3: UCIP_FA_2015_6237.jpg



Concrete U shaped headwall and flap gate on WS toe.

Photo 2 of 3: UCIP_FA_2015_6238.jpg



Outlet on WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.01	Rating **	U	Issue No.		214 (cont)	
LM End	5.01	Issue Type +	+ En Location *		Location *		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.10089	98 °	39.100898	٥
item			-122.01607	78 °	-122.016078	٥	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:44970

DS_ID:17191 EP_NO: N/A FS_HLM: 5.121 Repair Type: Urgent Crossing Status: Found



Apparent inlet clogged with concrete or grout on LS toe in drainage swale.

LM Start	5.19	Rating **	С	Issue No.	206			
LM End	5.19	Issue Type +	Ma	Location *		LS		
Category Earthen Levee			GPS La	atitud	le/Longitude			
Calegory			Start		End			
Item	Animal Co	ontrol		39.1034	90 °	39.103490	0	
item				-122.0163	40 °	-122.016340	0	
DWR ID DWR_MA0012_01_s _ 2012_206								
	Action/Comments							

Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Sutter Yard repaired the rodent hole.

No Photos

LM Start	5.98	Rating **	М	Issue No.	215		
LM End	5.98	Issue Type +	En	Location *	LS		
Category	Category				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UC	P Field Study		39.11494	9°	39.114949	0
пеш				-122.01794	6 °	-122.017946	0
DWR ID							
		Action/	Comme	nte			

Inspector Comments: FS_ID:44973

DS_ID:20715 EP_NO: 13699 FS_HLM: 6.116

Repair Type: Non-Urgent Crossing Status: Found



Pump with oil leakage shown on side of pipe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.98	Rating **	М	Issue No.		215 (cont)
LM End	5.98	Issue Type +	En	Location *	LS	
Category	Suppleme	GPS Latitude/Longitude				
Calegory						End
Item	DWR UCI	IP Field Study		39.11494	9°	39.114949 °
пеш			-122.01794	6 °	-122.017946 °	
DWR ID						

Action/Comments

Inspector Comments: FS_ID:44973

DS_ID:20715 EP_NO: 13699 FS_HLM: 6.116

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.Oil leakage around pump.7/16/2013

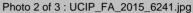
Same as last inspection.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 2: 20-inch soilproofed steel Stormdrain pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterward side. Siphon breaker in 24-inch metal pipe risers on waterward shoulder. Pump house at toe of landward slope. (Permit No.

13699, 1984). Replaced 18-inch pipe at same location.

FS Date: 05/05/2015

LM Start	5.98	Rating **	М	Issue No.	215 (cont)
LM End	5.98	Issue Type +	En	Location *	LS





Siphon Breaker on WS shoulder.

Photo 3 of 3: UCIP_FA_2015_6288.jpg



Pumping plant on LS slope

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.98	Rating **	М	Issue No.		216	
LM End	5.98	Issue Type +	En	Location *		LS	
Supplemental GPS La					tituc	e/Longitude	
Category				Start End			
Item	DWR UC	P Field Study		39.11496	63 °	39.114963 °	
item				-122.01794	17 °	-122.017947 °	
DWR ID							
	Action/Comments						

Inspector Comments: FS_ID:44974

DS_ID:20716 EP_NO: 13699 FS_HLM: 6.117

Repair Type: Non-Urgent Crossing Status: Found

LM Start	5.98	Rating **	М	Issue No.	216 (cont)
LM End	5.98	Issue Type +	En	Location *	LS



Pipes on LS slope.



Pumphouse on LS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.98	Rating **	М	Issue No.		216 (cont)	
LM End	5.98	Issue Type +	En	Location *		LS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	P Field Study		39.11496	3 °	39.114963 °	
item						-122.017947 °	
DWR ID							
	Action/Commants						

Action/Comments

Inspector Comments: FS_ID:44974

DS_ID:20716 EP_NO: 13699 FS_HLM: 6.117

Repair Type: Non-Urgent Crossing Status: Found



Siphon Breaker on WS shoulder.

LM Start	5.98	Rating **	М	Issue No.		217
LM End	5.98	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.1149	77 °	39.114977 °
пеш				-122.0179	47 °	-122.017947 °
DWR ID						·

Action/Comments

Inspector Comments: FS_ID:44977

DS_ID:17199 EP_NO: 9390 FS_HLM: 6.119

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.Minor oil leak on pump.7/16/2013

Same as last inspection.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3: 18-inch pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterward side. Siphon breaker in 16-inch metal pipe risers on waterward shoulder. Pump house at toe of landward slope. (Permit No. 9390 - Profpe) Originally included in O+M manual (1959).
FS Date: 05/05/2015

Pipe at exit from pumphouse.



* Location		** Rating		+ Issue T
LS : Land Side	N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Ma
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : De
CR : Crown		U : Unacceptable	A/W: Acceptable but Monitor & Maintain	En : En

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	5.98	Rating **	М	Issue No.		217 (cont)	
LM End	5.98	Issue Type +	En	Location *		LS	
Category	Suppleme	GPS Latitude/Longitude					
Calegory						End	
Item	DWR UCI	P Field Study		39.1149	77 °	39.114977	0
пеш			-122.0179	47 °	-122.017947	0	
DWR ID							

Action/Comments

Inspector Comments: FS_ID:44977

DS_ID:17199 EP_NO: 9390 FS_HLM: 6.119

Repair Type: Non-Urgent Crossing Status: Found

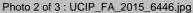
UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.Minor oil leak on pump.7/16/2013

Same as last inspection.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3: 18-inch pipe through levee, 4.4 feet below crown. Cobble revetted sump on waterward side. Siphon breaker in 16-inch metal pipe risers on waterward shoulder. Pump house at toe of landward slope.

O+M manual (1959). FS Date: 05/05/2015

LM Start	5.98	Rating **	М	Issue No.	217 (cont)
LM End	5.98	Issue Type +	En	Location *	LS





Siphon breaker on WS shoulder.

Photo 3 of 3: UCIP_FA_2015_6447.jpg



Pump house on LS slope.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	6.62	Rating **	С	Issue No.		23			
LM End	7.96	Issue Type +	Ma	Location *		CR			
Category Earthen Levee			GPS La	atituc	de/Longitude				
Calegory				Start		End			
Item	Crown Surface / Depressions /			39.1232	83 °	39.127985			
пеш	Rutting			-122.0227	38 °	-122.022767			
DWR ID	DWR_MA0	012_01_s _ 201	15_23						
Action/Comments									
Repair der	Repair depressions or ruts in the crown or slope								

Inspector Comments: Sutter Yard repaired the crown roadway.

No Photos

LM Start	7.58	7.58 Rating ** M		Issue No.		218
LM End	7.58	Issue Type + En Loc		Location *		CR
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.1371	87 °	39.137187 °
item				-122.0227	93 °	-122.022793 °
DWR ID						·

Action/Comments
Inspector Comments: FS_ID:44978

DS_ID:17163 EP_NO: 9390 FS_HLM: 7.753

Repair Type: Non-Urgent Crossing Status: Found



Animal burrows along side of pipe LS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	7.58	Rating **	М	Issue No.		218 (cont)		
LM End	7.58	Issue Type +	En	Location *		CR		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	IP Field Study		39.13718	37 °	39.137187 °		
item				-122.02279	93 °	-122.022793 °		
DWR ID								
			_					

Action/Comments

Inspector Comments: FS_ID:44978

DS_ID:17163 EP_NO: 9390 FS_HLM: 7.753

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Corssing appears to be in good condition. No noticeable issues to report.Rodent burrowing along sides of pipe on LS.7/16/2013 Same as last inspection.12/16/2013 Same as last inspection.6/17/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch steel pipe through levee, 3.0 feet below crown. Both ends capped, terminating on levee slopes. (Permit No. 9390 - Profpe) Originally included in O+M manual (1959).

FS Date: 05/05/2015

LM Start	7.58	Rating **	M	Issue No.	218 (cont)
LM End	7.58	Issue Type +	Fn	Location *	CR



Pipe on LS.

Photo 3 of 3: UCIP FA 2015 6450.jpg



Pipe on WS.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	9.03	Rating **	U	Issue No.		219		
LM End	9.03	Issue Type +	En	Location *	CR			
Category				GPS Latitude/Longitude				
Category			Start		End			
DWR UCIP Field Study			39.15809	97 °	39.158097 °			
item				-122.02170)6 °	-122.021706 °		
DWR ID								
Action/Comments								
Inspector Comments: FS_ID:44980								

DS_ID:17166 EP_NO: 9390 FS_HLM: 9.231 Repair Type: Urgent Crossing Status: Found

 LM Start
 9.03
 Rating **
 U
 Issue No.
 219 (cont)

 LM End
 9.03
 Issue Type +
 En
 Location *
 CR



Slidegate on WS toe.

Photo 2 of 2 : UCIP_FA_2015_6452.jpg



Tilting headwall on WS toe.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	9.03	Rating **	М	Issue No.		220		
LM End	9.03	Issue Type +	En	Location *		CR		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.158124 °		39.158124°		
item			-122.021701 °		-122.021701 °			
DWR ID						·		
Action/Comments								

Inspector Comments: FS_ID:44981

DS_ID:17165 EP_NO: 9390 FS_HLM: 9.232

Repair Type: Non-Urgent Crossing Status: Indicator Found

LM Start	9.03	Rating **	М	Issue No.	220 (cont)
LM End	9.03	Issue Type +	En	Location *	CR



headwall debris on LS toe showing evidence of 18-inch cmp.

Photo 2 of 3: UCIP_FA_2015_6454.jpg

headwall debris on LS toe showing evidence of 18-inch cmp.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	9.03	Rating **	М	Issue No.		220 (cont)	
LM End	9.03	Issue Type +	En	Location *		CR	
Category	Supplemental			GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCIP Field Study			39.1581	24 °	39.158124°	
item				-122.0217	01 °	-122.021701 °	
DWR ID							
A - 1' 1'O 1 -							

Action/Comments

Inspector Comments: FS_ID:44981

DS_ID:17165 EP_NO: 9390 FS_HLM: 9.232

Repair Type: Non-Urgent Crossing Status: Indicator Found



Pump platform at center left of photo.

LM Start	9.29	Rating **	М	Issue No.		26
LM End	9.29	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory	y			Start		End
Item	Animal Control			39.1618	47 °	39.161847 °
Item				-122.0218	95 °	-122.021895 °
DWR ID DWR_MA0012_01_f _ 2015_26						

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Repair the rodent holes on the landside slope.

No Photos

LM Start	10.46	Rating **	С	Issue No.		24			
LM End	10.77	Issue Type +	Ma	Location *		CR			
Category	Catagoni Earthen Levee				GPS Latitude/Longitude				
Calegory		Start		End					
Item	Crown Surface / Depressions /				43 °	39.177968	0		
item	Rutting			-122.0148	00°	-122.014315	0		
DWR ID	DWR_MA0	15_24							
Action/Comments									

Repair depressions or ruts in the crown or slope.

Inspector Comments: Sutter Yard repaired the crown roadway.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side	A : Acceptable M : Minimally Acceptable	N : Not Inspected/Rated C : Corrected	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	10.49	Rating **	С	Issue No.		11		
LM End	10.49	Issue Type +	Ma	Location *		LS		
Category	Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End		
Item	Slope Stability			39.17397	1°	39.173971 °		
item				-122.014362	2°	-122.014362 °		
DWR ID DWR_MA0012_01_f _ 2013_11								
	A :: 10							

Action/Comments

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comments: Sutter Yard repaired the landside slope.

No Photos

LM Start	10.92	Rating **	U	Issue No.	221				
LM End	10.92	Issue Type +	En	Location *	LS				
Category	Supplemental			GPS Latitude/Longitude					
Calegory	Category			Start		End			
Item	DWR UCI	P Field Study		39.180039	°	39.180039	0		
пеш				-122.014266	°	-122.014266	0		
DWR ID									
	A :: 10								

Action/Comments

Inspector Comments: FS_ID:44984

DS_ID:17157 EP_NO: 9386 FS_HLM: 11.16 Repair Type: Urgent Crossing Status: Found



Bent and broken actuator on slide gate in 36-inch CMP. Pipe appears to be filled with soil.

Levee Inspection Report By Mile - Fall 2015

Sutter Maintenance Yard Maintenance Area 0012

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Colusa Drain	Left	11.06	09/15/2015 09/15/2015	Bob Duffey

LM Start	10.92	Rating **	U	Issue No.		221 (cont)		
LM End	10.92	Issue Type +	En	Location *		Location *		LS
Catagony	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study			39.1800	39°	39.180039°		
item					66 °	-122.014266 °		
DWR ID								

Action/Comments

Inspector Comments: FS_ID:44984

DS_ID:17157 EP_NO: 9386 FS_HLM: 11.16 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 5/4/2015 Both pipe ends and slide gate in riser are plaugged with soil. Crossing is inoperable.Pipe plugged with soil on both ends as well as at slide gate on WS slope. Slide gate inoperable.7/16/2013 Same as last inspection.12/16/2013 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch Corrugated metal drainpipe through the levee, 8.0 feet below the crown. Slide gate in 36-inch pipe riser on the waterward shoulder. (Permit No. 9386 - Wescott) Levee turns eastward.

FS Date: 05/05/2015



cover on 36-inch CMP standpipe on WS slope.